

Name of Facility or centre	Product Design Lab
Academic year of establishment	2018-19
School Name	School Of Design
Incharge Name	Mr. Bhavin Patel

Introduction

The Centre of Excellence for Research for Design at our esteemed university serves as an eminent hub for pioneering scholarly inquiry and innovation in the realm of design. Fostering interdisciplinary collaboration and cutting-edge methodologies, it endeavors to advance the frontiers of knowledge in diverse design disciplines. Through progressive endeavors, it aims to unravel novel insights, catalyzing transformative solutions to contemporary and future challenges. With a steadfast commitment to excellence, the center cultivates a dynamic ecosystem conducive to the cultivation of visionary designers and thought leaders. It stands as a beacon of intellectual prowess and scholarly distinction within the academic landscape.

Vision and Impact

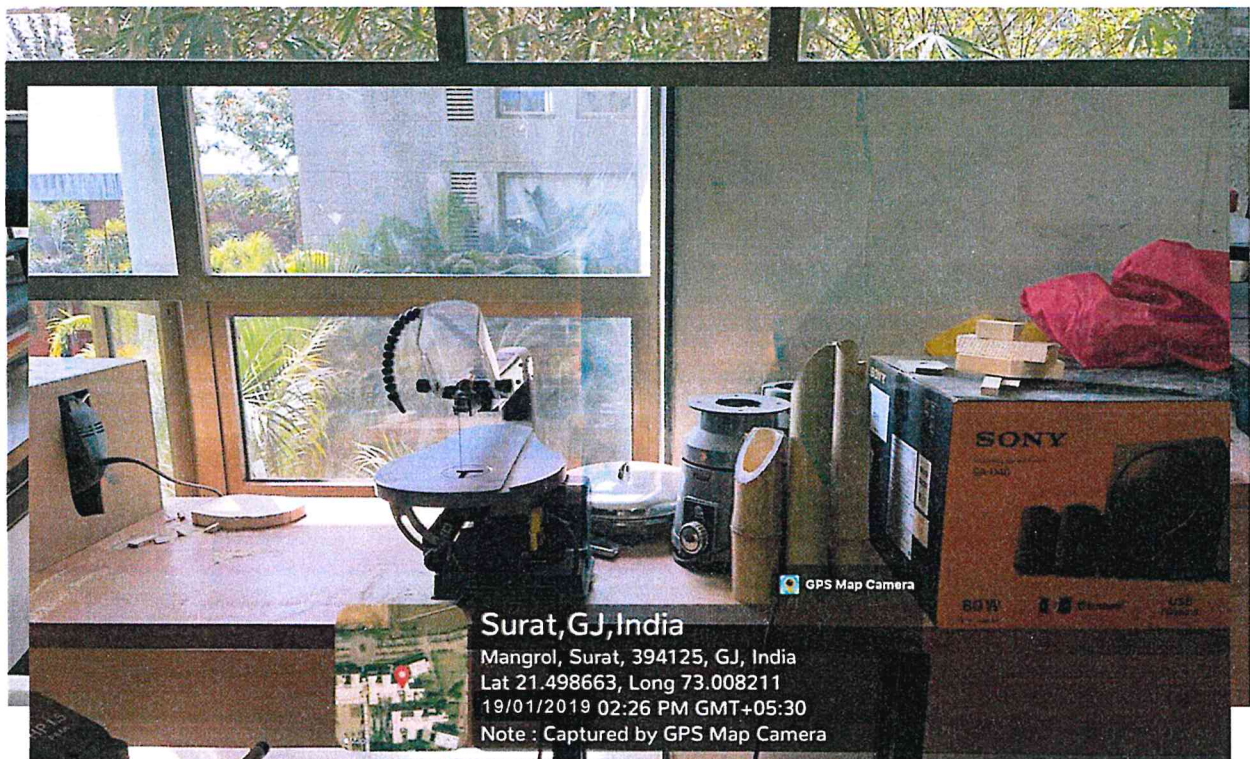
To emerge as a leading Design institute by cultivating the Culture of Innovation and Invention through Research based Problem Solving approach.

- To encourage students to explore, experience and feel empowered by following the philosophy of “learning by doing”.
- To make students aware about the connection between our culture, society and global issues through experiential and project based teaching-learning pedagogy.
- To provide state of the art facilities for teaching, learning & research to transform a student into a Design Professional.
- To prepare value-aided Design professionals to meet up global industry requirements by providing the conducive environment to explore & experience.

Infrastructure and Facilities

The centre boasts an array of sophisticated equipment and facilities designed to support the Design students in all the programs taught under School of Design . Key facilities include:

➤ HAND TOOLS



➤ JIGS-SAW MACHINE

Brand	MAF PRO
Blade Material	Alloy Steel

Surface Recommendation	Indoor
Power Source	Corded Electric
Included Components	Scroll Saw
Product Dimensions	55L x 30W x 26H Centimeters
Voltage	230 Volts
Item Weight	2.4 Kilograms
Speed	1440 RPM
Cutting Angle	45 Degrees
See more	

About this item

- **Powerful Performance:** The MPSC-85 Electric Scroll Saw features an input power of 85W, providing efficient and reliable cutting capabilities.
- **Variable Speed Control:** With a no-load speed ranging from 0 to 1440rpm, this scroll saw offers variable speed control for versatility in different cutting applications.
- **Spacious Cutting Dimensions:** Enjoy a maximum cutting depth of 50mm and a generous cutting width of 410mm. The spacious table size of 375*250mm ensures stability and accommodates various workpieces.
- **Precision Blade:** The scroll saw is equipped with a 1332.60.25mm (18TPI) blade, facilitating precision cutting for intricate patterns and detailed work.
- **Smooth and Stable Operation:** Powered by an induction motor, this scroll saw ensures smooth and consistent cutting. The anti-vibration design enhances stability during operation for accurate results.
- **Tool-Free Blade System:** Experience convenience with the quick and easy tool-free blade system, allowing for efficient blade changes without the need for additional tools.

- **Versatile Table Tilt:** The steel table offers a versatile tilt of 45° left and right, providing flexibility for angled cuts and expanding the range of creative possibilities in woodworking projects.
- **MITRE SAW MACHINE**



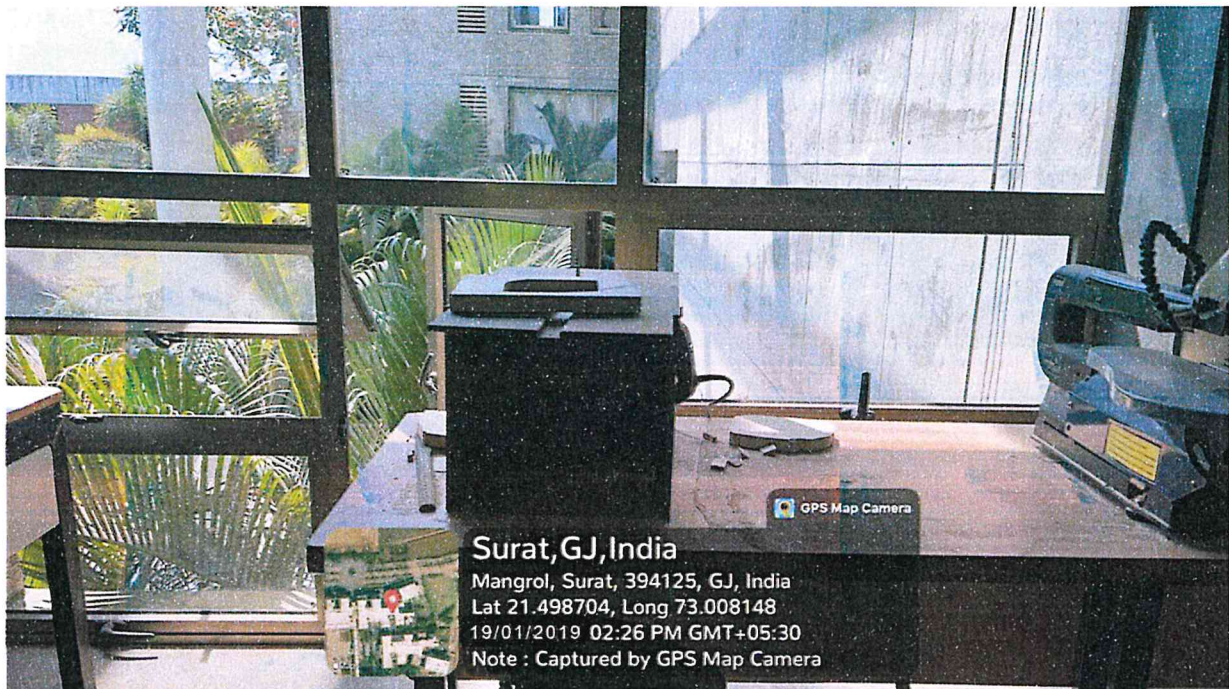
Brand	RTC
Blade Material	Alloy Steel
Surface Recommendation	Wood, Aluminum
Power Source	Corded Electric
Special Feature	Bevel Capability
Included Components	Attachments
Product Dimensions	38.5L x 24.8W x 24.8H Centimeters
Voltage	500 Volts
Warranty Type	Extended

Item Weight 17.64 Pounds

About this item

- Durable use with high-precision and multi-function cutting.
- Rated Power Input(W)1650
- No-Load Speed (r/min)4600
- Blade Diameter(mm)255
- Net Weight(kg)12

➤ PORTABLE JIG SAW

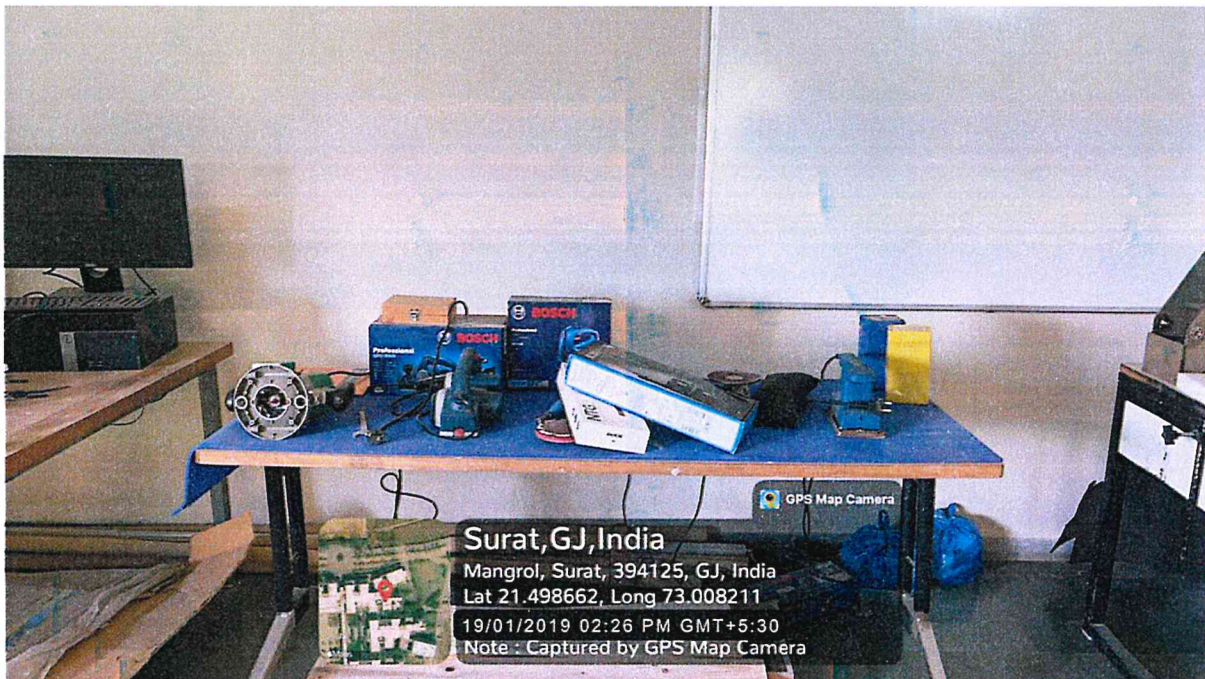


Brand	IBELL
Colour	Red & Black
Blade Material	High Speed Steel
Surface Recommendation	Wood
Power Source	Corded Electric

Special Feature	Bevel Capability
Included Components	Attachments
Product Dimensions	36L x 10W x 30H Centimeters
Voltage	230 Volts
Warranty Type	Limited

About this item

- Rated voltage : 230V~50Hz
- Rated Input Power : 650 W; Rated no load speed : 800-3000 rpm
- Wood Cutting capacity : 65 mm
- Steel Cutting capacity : 6 mm
- Weight : 2.52 Kg
- Protection class : Class II
- **POWER TOOLS**



- **Sanders:** Sanders are used to smooth surfaces by abrasion with sandpaper. There are various types of sanders including belt sanders, orbital sanders, and random orbital sanders. They are used to remove rough edges, old paint, or

varnish, and to prepare surfaces for finishing or painting. Sanders are commonly used in woodworking, carpentry, and DIY projects.

- **Router:** Routers are versatile power tools used to hollow out an area in a hard material, typically wood, plastic, or metal. They can be used to create decorative edges, cut grooves, shape wood, and carve intricate designs. Routers come in both handheld and table-mounted varieties, and they use different types of bits or cutters depending on the desired outcome.
- **Planer:** Planers are used to shave off thin layers of material from a wooden surface to create a smooth and even finish. They are commonly used in woodworking to flatten boards, reduce thickness, and remove imperfections such as twists or warps. Planers come in handheld and stationary models, with handheld planers suitable for smaller projects and stationary planers used for larger pieces of wood.

➤ ROLLING MACHINE



The rolling machine, also known as an Etching Press or Printing Press, consists of a heavy roller mechanism. A sheet of dampened paper is placed carefully over the inked plate. Then, the plate and paper are passed through the rolling machine. As the plate and paper pass through the rolling machine, the pressure exerted by the rollers causes the paper to press into the grooves of the plate, picking up the ink. The result is a transferred image onto the paper.

After the transfer, students carefully peel back the paper to reveal the print. They may inspect the print for quality and may repeat the inking and printing process multiple times to achieve the desired effect.

➤ THERMACOL CUTTER



Thermocol cutter is usually powered by electricity. It consists of a handle or frame with a heated wire stretched between two points. Some models may have a control unit to adjust the temperature of the wire. The desired cutting line or shape is marked on the foam using a pencil or marker. Precision in marking is essential for achieving accurate cuts. The heated wire of the cutter is brought into contact with the marked line on the foam. The wire melts through the foam, creating a clean and precise cut. It's important to move the cutter steadily and smoothly along the marked line to ensure an even cut.

In addition to straight cuts, thermocol cutters can be used to create intricate shapes and curves by carefully guiding the wire through the foam. This makes them useful for various crafting, modeling, and DIY projects. After use, it's important to allow the wire to cool down before storing the cutter. This helps prevent accidental burns and prolongs the lifespan of the wire.

Thermocol cutters are commonly used in crafts, hobbies, architectural modeling, theater set design, and prototyping due to their ability to cut and shape foam with precision and ease. They offer a versatile and efficient way to work with foam materials, allowing for the creation of detailed and professional-looking projects

➤ **T SHIRT PRINTING**

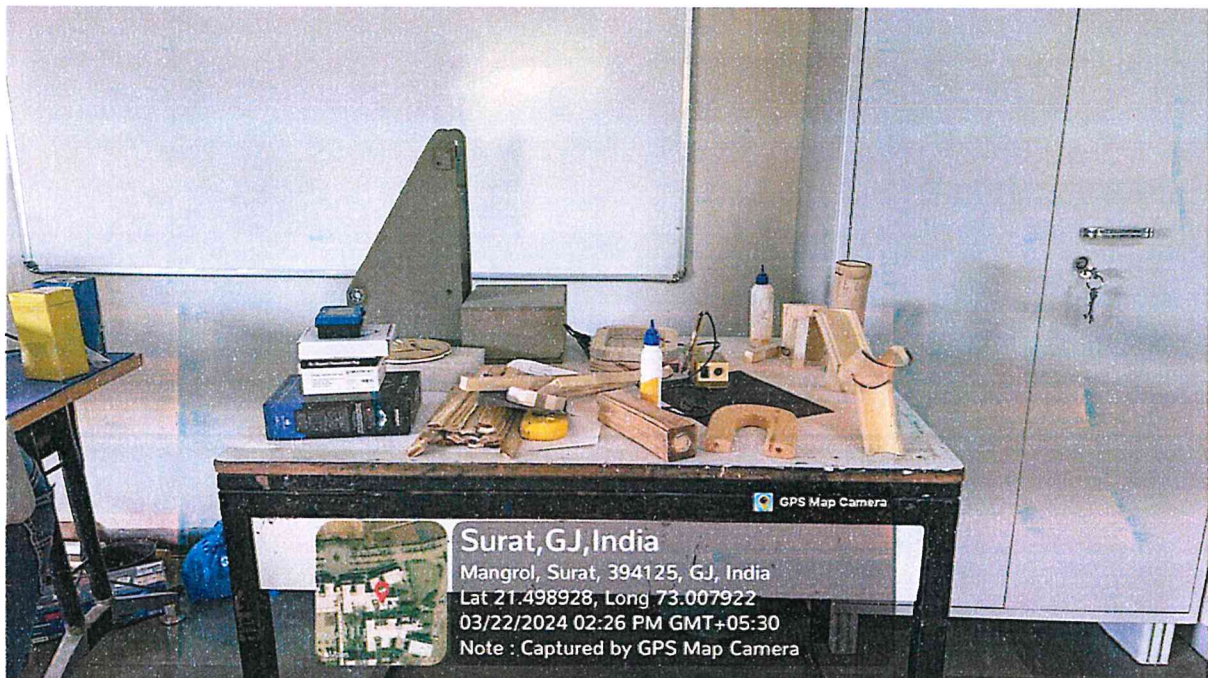


T-shirt printing machines are specialized devices used to transfer designs, logos, or artwork onto T-shirts and other garments. These machines typically utilize various printing techniques such as screen printing, direct-to-garment (DTG) printing, heat transfer printing, or vinyl cutting. They come in different sizes and capabilities, from small, desktop models suitable for hobbyists to large, industrial-grade machines for mass production.

T-shirt printing machines are often equipped with advanced features like automatic registration, adjustable printing heads, and high-resolution printing capabilities to ensure precise and vibrant results. They play a crucial role in the custom apparel

industry, enabling businesses and individuals to create personalized and unique clothing items efficiently.

➤ **HANDMADE MODELS**



Working with handmade models provides students with valuable hands-on experience in understanding materials, construction techniques, and spatial relationships. This tactile approach helps students develop a deeper understanding of design principles and enhances their problem-solving skills.

3D Modeling: While handmade models offer a tangible representation of design concepts, 3D modeling plays a complementary role in the design process. Students learn to create digital models using software such as Autodesk Fusion 360, SolidWorks, or Blender. These digital models allow for precise measurements, detailed rendering, and virtual prototyping, complementing the physical models crafted by hand.

Different Materials: Handmade models can be crafted from a wide range of materials, each offering unique properties and aesthetic qualities. For example:

Clay: Ideal for sculpting organic forms and exploring surface textures.

Foam: Lightweight and easy to carve, suitable for rapid prototyping.

Cardboard: Affordable and readily available, perfect for creating structural mock-ups and packaging designs.

Wood: Durable and versatile, suitable for creating detailed models with intricate joinery.

Plastics: Can be moulded or sculpted to create prototypes with specific shapes and features.

DESIGN LOUNGE



Design Lounge, a vibrant hub within the university campus designed to cater to the recreational and creative needs of students. It serves as a multifunctional space where students can unwind, collaborate, and showcase their projects in an inspiring environment.

The Design Lounge hosts various recreational activities, providing students with opportunities to relax and socialize outside of academic settings. From casual board games to interactive group activities, there's something for everyone to enjoy and foster a sense of community among peers.

In addition to leisure activities, the Design Lounge offers a platform for students to present their projects and creative endeavors. Whether it's showcasing design prototypes, artwork, or multimedia presentations, students can share their work with their peers and faculty members in a supportive and collaborative setting.

The lounge also serves as a venue for hosting creative movie screenings, allowing students to explore diverse cinematic experiences and draw inspiration from storytelling, visuals, and aesthetics across different genres and cultures.

Furthermore, the Design Lounge serves as a hub for conducting workshops and seminars on various topics related to design, innovation, and creativity. These events provide students with valuable opportunities to learn new skills, exchange ideas, and engage with industry professionals, faculty members, and guest speakers.

Overall, the Design Lounge is more than just a recreational space—it's a dynamic hub that fosters creativity, collaboration, and personal growth among students, providing a supportive and inspiring environment where ideas flourish and connections are forged.



Incharge



Principal



Registrar

Registrar
P P Savani University



Registrar
P P Savani University